UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,395	06/20/2001	Delphine Coppens	55550US006	3952

10

32692 7590 07/09/2003

3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST. PAUL, MN 55133-3427

EXAMINER
EGAN, BRIAN P

ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/885,395	COPPENS ET AL.	
	Examiner	Art Unit	
	Brian P. Egan	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-12 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Bingham (#3,758,192) in view of Baker et al. (#4,166,152).

Bingham teaches a label for affixing to a garment ("fabrics"; Col. 1, lines 7-9) wherein the label comprises a backing layer (Fig. 7, #16), a first adhesive layer comprising a heat activatable adhesive (Fig. 7, #18), and a second heat activatable adhesive (Fig. 7, #28). The second adhesive layer is provided directly on the first adhesive layer (see Fig. 7). The backing layer has a first and second major side wherein one side is retroreflective (Fig. 7, #14) and the side opposite the retroreflective side carries the first and second adhesive layers (see Fig. 7). The first adhesive layer is non-tacky at temperatures less than 60 degrees Celsius ("layer is cured at 60 degrees Celsius"; Col. 8, line 3) and permanently bonds the backing layer to a garment when heated to a temperature between 85 and 160 degrees Celsius (Col. 10, lines 17-19). Both the first side of the backing layer and the outer surface of the second adhesive layer comprise removable layers protecting the label prior to affixing it to a substrate (Fig. 1, #10 and Fig. 7, #26, respectively). The label further includes means for retroreflecting light carried by the side of the backing layer opposite the adhesive layers wherein the retroreflective means are selected from glass beads or microspheres (Col. 1, lines 9-10). Bingham does not explicitly state that the

thickness of the second adhesive layer is between 10 and 40 micrometers although Bingham does teach that the first adhesive layer is 400 microns in thickness (Col. 7, lines 55-58) and that when the second adhesive layer is employed, a portion of the thickness of the first adhesive layer is replaced by the second adhesive layer (Col. 6, lines 23-29). Therefore, the thickness of the second layer implicitly falls within the range of 0 to 400 micrometers. Furthermore, it would have been obvious to one of ordinary skill in the art to have modified the thickness range of the second adhesive layer since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Bingham fails to teach the second adhesive layer comprising elastomeric microspheres.

Baker et al., however, teach infusible elastomeric microsphere adhesive (see Abstract) wherein the microspheres range from 1 to 250 microns in size (Col. 4, lines 13-16) and wherein the microspheres may be added to a hot melt adhesive for the purpose of providing a positionable hot melt adhesive system (Col. 4, lines 41-45). It would have been obvious through routine experimentation to one of ordinary skill in the art at the time applicants invention was made to have modified a label for affixing to a garment with microspheres in its outermost adhesive layer for the purpose of providing a positionable hot melt adhesive system as taught by Baker et al.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicants invention was made to have modified Bingham by dispersing microspheres within the second hot melt adhesive layer as taught by Baker et al. in order to provide a positionable hot melt adhesive system. Such a modification is in line with the teachings of Bingham since Bingham teaches that the additional adhesive layer is used to help the common housewife to

laminate the film to a fabric using a hand iron (Col. 6, lines 20-29). Therefore, Baker et al. would have been motivated to use a repositionable adhesive layer to further facilitate one in easily positioning the adhesive prior to ironing the substrate on to the desired end product.

Response to Arguments

3. Applicant's arguments (see paper no. 9), filed April 9, 2003, with respect to the 35 U.S.C. 112, first and second paragraph rejections from the previous office action have been fully considered and are persuasive. Pursuant to the Applicant's amended claims, the rejection of claims 1, 4, and 8 over 35 U.S.C. 112 have been withdrawn.

4. Applicant's arguments filed April 9, 2003 with regards to the 35 U.S.C. 103(a) rejection of claims 1-12 as being unpatentable over Bingham (#3,758,192) in view of Baker et al. (#4,166,152) have been fully considered but they are not persuasive.

The Applicant's primary contention is that Baker et al. fail to teach an "infusible" adhesive as claimed. The Examiner respectfully disagrees. The Applicant's explicitly state on page 5 of the specification that "the second adhesive layer of the label comprises an elastomeric microsphere adhesive. Particularly suitable elastomeric microsphere adhesives for use in this invention are disclosed in... US 4,166,152 (Baker et al.). The microsphere adhesives described in these patents are infusible...." Therefore, the Applicant explicitly contradicts the contentions made in paper no. 9 and disclose that Baker et al. teach an infusible microsphere adhesive. This is further supported in Baker et al. (see Abstract).

The Applicant further contends that it would not be apparent how the combination set forth in claims 1 and 8 would yield a label that is both repositionable and permanently affixable to a garment or other substrate. The Examiner respectfully disagrees. First, the limitations on

which the Applicant relies, i.e., that the article is repositionable and permanently affixable upon heat activation, is not stated in the claims. It is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable. *Constant v. Advanced Micro-Devices Inc.*, 7 USPQ2d 1064. Second, Baker et al. teach that the microspheres are combinable with a hot melt adhesive on a substrate to provide a positonable hot melt adhesive system, as disclosed in commonly assigned and copending U.S. application 742,743 of Loder et al. [now patent #4,049,483] (Col. 4, lines 41-45). It is notoriously well known as evidenced by Loder et al. that the combination of a hot melt adhesive along with infusible microsphere adhesive provide an adhesive that is repositionable at room temperature and permanent upon heat activation of the hot melt adhesive (see Loder et al., Col. 2, lines 16-23 and 35-37). Thus, Baker et al. implicitly teach the use of a hot melt adhesive that is repositionable at room temperature and permanent upon heat activation. Therefore, the Examiner maintains the 35 U.S.C. 103(a) rejection as detailed above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Egan whose telephone number is 703-305-3144. The examiner can normally be reached on M-F, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Brian P. Egan

BPE
July 7, 2003

William P. Watkins III

WILLIAM P. WATKINS III
PRIMARY EXAMINER